

1     **ABSTRACT OF THE DISCLOSURE**

2             A conductive connection forming method includes forming a first  
3     layer comprising a first metal on a substrate and forming a second layer  
4     comprising a second metal different from the first metal on the first  
5     layer. At least a part of the first layer may be transformed to an alloy  
6     material comprising the first and second metals. A conductive  
7     connection may be formed to the alloy material. The alloy material may  
8     be less susceptible to formation of metal oxide compared to the first  
9     metal. By way of example, transforming the first layer may comprise  
10    annealing the first and second layer. An exemplary first metal comprises  
11    copper, and an exemplary second metal comprises aluminum, titanium,  
12    palladium, magnesium, or two or more such metals. The alloy material  
13    may be an intermetallic. A conductive connection may be formed to the  
14    alloy layer. An integrated circuit includes a semiconductive substrate, a  
15    layer comprising a first metal over the substrate, and a layer of alloy  
16    material within the first metal comprising layer. The alloy material layer  
17    may comprise the first metal and a second metal different from the first  
18    metal. The alloy material may be an intermetallic. A conductive  
19    connection may be formed on the alloy layer.

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